

REMARKS

Claims 1-4, 7-13 and 16-20 are pending. Claims 1, 2, 4, 12, 13, 16, 17 and 18 have been amended. Claims 5, 6, 14 and 15 have been cancelled without prejudice. Claims 1, 4, 7, 8, 12 and 16-18 are the independent claims.

Applicants note with appreciation the allowance of Claims 7, 8, 10 and 11 and the indication that Claims 6 and 16-18 would be allowable if rewritten so as not to depend from a rejected claim, and with no change in scope. Claim 4 has been rewritten into independent form, with the subject matter of claim 6 added, and therefore is clearly allowable, since it now reads as claim 6 would have in independent form. Claim 16 has been rewritten in independent form. Claims 17 and 18 also have been so rewritten, but without the subject matter of the intervening claims. The features of the intervening claims relating to claims 17 and 18 are not believed necessary for patentability and it is submitted that claims 17 and 18 recite features not found in the cited art. In view of the above, claims 4 and 16-18 are now believed to be in condition for allowance.

Claims 1 and 12 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Published Appln. No. 20030037167A1 (Garcia-Luna-Aceves). Claims 2, 3 and 13 were rejected under 35 U.S.C. § 103(a) as unpatentable over Garcia-Luna-Aceves in view of U.S. Patent 5,034,933 (Sausta). Claims 4, 5, and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Garcia-Luna-Aceves in view of U.S. Published Appln. No. 005850592A (Ramanathan). Claims 9 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Garcia-Luna-Aceves in view of U.S. Published Appln. No. 006137885A (Totaro et al.). Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Garcia-Luna-Aceves in view of Sausta et al., and further in view of Ramanathan. Claim 20 was rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia-Luna-Aceves in view of Sausta et al., and further in view of Totaro et al.

A feature of claim 1 not taught or suggested in the art of record is that in a relay station device having a first function for directly communicating with a center and a second function for communicating with the center via another relay station, one of a first operating mode for executing the first function and a second operating mode for executing the second function is set to the relay station device, and wherein a mode is selected based upon a communication quantity of the relay station device.

As was conceded in the Office Action, Garcia-Luna-Aceves does not teach this feature. In relation to claim 2, the position was taken in the Office Action that it would have been obvious to combine Sausta, which shows a method of allocating communication resources, with Garcia-Luna-Aceves. However, the manner of deciding which path to use in Garcia-Luna-Aceves is dependent on optimizing, i.e., seeking the shortest, distance between an IR and destination. That is, “the IR chooses a neighbor *n* as its successor (next hop) towards a destination if, and only if, (1) the distance to the destination through that neighbor is the smallest attainable distance to the destination through any neighbor, and (2) the distance to each intermediate hop in the path from the IR to the destination through neighbor *n* is the smallest attainable distance to that destination through any neighbor.” Paragraph 0083 of Garcia-Luna-Aceves.

For at least this reason, there would have been no motivation to modify Garcia-Luna-Aceves’ device to add another variable, namely the amount of communication arriving at the IR, in deciding whether direct or indirect communication should be employed, since using this additional criteria would often work against Garcia-Luna-Aceves’ design goal of utilizing the shortest path to the destination. For at least this reason, no one of ordinary skill in the art would have been motivated to make the proposed modification, and amended claim 1 is believed patentable.

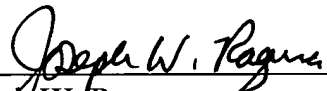
Claim 12 recites substantially the same feature and is believed patentable for similar reasons.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

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Respectfully submitted,

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